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SYSTEM AND METHOD OF IP PACKET FORWARDING ACROSS DIRECTLY CONNECTED FORWARDING ELEMENTS

ABSTRACT OF THE DISCLOSURE

Systems and methods are provided through which a packet is transferred within a router through the use of a switch-label. The switch-label is generated upon receipt by a component of the router. The switch label indicates an address within the router of another component within the router that will transmit the packet to a destination outside the router. The switch-label uses an abbreviated address of components within the router. The address is abbreviated because the number of potential addresses within a router is significantly less than the number of addresses outside the router that require a full address. As a result, transferring of the packet within the router is faster because processing the switch-label using an abbreviated address is faster than processing a full address.

"Express Mail" mailing label number: <u>EL671639929US</u>
Date of Deposit: <u>August 17, 2001</u>
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